

PHILADELPHIA MEDICAL TIMES.

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ORIGINAL LECTURES.

CLINICAL LECTURE.

REMARKS ON CONCUSSION OF THE SPINE.

CASES OF SPINAL CONGESTION, WITH ONE AUTOPSY.

Reported by Dr. W. H. PARISH, from a Lecture

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CONCUSSION of the spine has, by writers, been divided into two kinds: primary and secondary concussion. The former term has been applied to a condition attended with symptoms which present themselves immediately after the reception of a blow on the back, or more generally of a fall, as from a scaffolding or a railroad-car. In this, the true form of concussion of the spine, there is no discernible lesion even to the microscope; yet there must be some disarrangement of the relations to each other of the minute nerve-structures of the cord,—a disarrangement which occurs at the time of the reception of the injury, and which is immediately attended with such symptoms as were presented in the following history of the patient now before us.

I. S. B., æt. 44, fell, on August 27, 1872, through a skylight, down, some thirty feet, to the floor. He was picked up in an unconscious condition, but recovered his mental faculties in about twenty-four hours. From the moment of the fall he was absolutely paralyzed in all those muscles dependent for their nerve-influence upon the spinal cord below the fourth or fifth vertebra. Although placed under no medical treatment, in three weeks he was able to move the toes of the left foot, and a few days later motion began gradually to return to the other extremities. In six months, still without medical treatment, the man was able to walk, though with decided lameness.

The above statements we gathered from the patient himself. On the 18th of March he was first seen by us. He then presented the following conditions:

His powers of locomotion were quite good, yet there was a lameness in his gait. There was no marked wasting of the muscles of the lower extremities. The grasp of either hand was less than normal: the right being somewhat better than the left. Since the finer motions of the fingers were impaired, he could scarcely pick up a pin. The arm could be flexed by the patient, but with apparently more than ordinary exertion. The biceps in each arm seemed to have lost much of its power, and there was tonic spasm of the triceps extensor. Both deltoids were evidently wasted. There were at times, also, pains along the vertebral column. To-day there is no change in these conditions, excepting some slight improvement.

At the time this man was picked up there was complete spinal paralysis, and the case was therefore one of spinal concussion; but that concussion has resulted in the production of some positive inflammatory lesion. I do not think there is softening of the cord-substance. When we apply the electrodes

of the battery, you see that the deltoid, triceps, biceps, and, in fact, all of the arm-muscles, respond. This response shows that the nerve-cells of the cord cannot be destroyed, for were such the case the deltoid would not at all respond at this date, more than six months from the occurrence of the injury.

Were there softening, the paralysis would be considered beyond the reach of any remedial measure. Most probably there is slight sclerosis, with meningitis. By sclerosis is meant an inflammation of the connective tissue of the cord, attended with induration, and slow and chronic in its nature. The pain and muscular spasm indicate an inflammatory condition of the meninges irritating the nerves as they pass through those coverings. It has been stated that if there is chronic meningitis, the application of heat or cold along the vertebral column will be accompanied with more than the ordinary amount of pain. This test, when responded to, is of diagnostic value, but if it is not productive of pain we cannot say that chronic meningitis does not exist. In this instance, as you now see, this test gives no response.

We have instituted the following treatment for this patient. He is taking the iodide of potassium in liberal doses, one drachm three times daily, after meals. If the remedy produces much nausea, headache, or its characteristic eruption, it is to be suspended for a few days, but to be renewed and persisted in. It would be trifling with our patient to administer this remedy in five- or ten-grain doses. Counter-irritation along the spine is to be employed. For the muscles we have directed kneading, friction, and faradization, with passive exercise. To the contracted muscles is to be applied belladonna in some form, either by rubbing in the ointment, or, by what is better, the hypodermic use of atropiæ sulph. This remedy, by diminishing the power of nerve-structure to convey nerve-influence, is our most efficient agent in the relief of spasm. Of course good diet, fresh air, and medicinal tonics, as called for, are not to be neglected. I believe our patient can be cured if such a course is faithfully persisted in.

Under the head simply of concussion, or sometimes of secondary concussion, of the spine, have been described numerous cases, which, from their frequency in railroad-accidents, are assuming great importance. Especially is this true since they are very frequent subjects of legal inquiry, owing to the institution of suits for damages by the injured parties. In these cases the symptoms do not develop themselves at once. Often has the subject of this affection extricated himself from the debris of a wrecked train, assisted those about him in getting free, spent hours, perhaps, in relieving the injured, and congratulated himself that he has escaped injury. Days, weeks, or months after the injury, the symptoms of deranged innervation come on, perhaps most insidiously, and progress until the sufferer is as much a wreck as the fated train itself. The chief point I want to call your attention to to-day, is that these cases are not cases of concussion,

but are really instances of traumatic inflammation or congestion of the cord, and have no more right to the name by which they are generally known, than has an abscess of the brain from external violence to that of concussion.

The relation between these cases and those of true spinal concussion is, indeed, almost precisely that between cerebral concussion, with its sudden suspension of consciousness, and that of latent abscess of the brain from a blow, with its slow and insidious development of symptoms.

There is now under our care at the Philadelphia Hospital a patient whose history will present you a case of this so-called concussion of the cord. It is as follows:

Thomas S., æt. 35, of good general health, fell, on March 6, 1873, through the opening in a coal-car while dumping it, and alighted on his feet. The accident was accompanied with some pain in the small of the back, but the man was able to walk home,—some two miles. He was admitted to the hospital on March 8, being, however, able to walk a considerable distance. On the 9th he noticed that his legs were weak. On the 10th there was increased weakness, with numbness and pricking sensations in the feet and legs, and to a slight extent in the left hand. There was also pain in the lumbar region. On the 14th the aching pains and numbness in both legs had increased; the left being more affected than the right. The patient was entirely unable to stand; and so complete had become the paralysis of the lower extremities that he could not raise his knees from the bed. The flexor muscles seemed somewhat less involved than the extensors. No anæsthesia.

No distinct loss of power in the upper extremities. At night there was some shortness of breath.

He was ordered ext. ergot. fl. f3ss; fifteen ounces of blood were taken from the margin of the anus by leeches.

On the 15th the pains had disappeared.

March 20.—Slight improvement since last note. The knees can be slightly raised from the bed. Has not had an erection of the penis since his admission.

To-day began the use of a continuous current along the spine daily, and faradization to affected muscles on alternate days. Friction, kneading, and shampooing of the lower extremities with lin. saponis are also to be resorted to.

March 25.—Ext. ergot. fl. increased to f3j *ter die*, without being productive of any unpleasant symptoms save a little nausea. Motion in legs a little improved.

Now, gentlemen, what is the true pathology of this case? Evidently, it is not right to call it concussion. Evidently, if there is not to be an endless confusion in the nomenclature of nervous disease, this affection is to be called a traumatic lesion of the spinal nerve, precisely as a similar affection of the brain similarly produced would be spoken of as a traumatic lesion of the cerebral centres. But can we not define more particularly what the lesion is? Certainly. You will remember that in a lecture delivered some time since I told you that there is an acute affection of the spinal nerve, which is clinically distinguished by the gradual but rapid and unequal development of a creeping paralysis, affecting the legs in most instances more than the arms, by the absence of febrile reaction or of severe pain, and by the presence of numbness, and of a feeling of "being asleep," or of prickling, in the affected limbs. I

told you also that this disease was produced by a variety of causes, among others by exposure to cold, by lying upon the back on cold ground, by fatigue, and by a "wrench of the back." In regard to its pathology you were told that post-mortems are very rare, there being very few on record, but that the lesion is without doubt a congestion of the vessels around and pressing upon the cord, and a consequent exudation of serum into the canal. Since that lecture I have had a fatal case; and I lay the history before you, to show the similarity of the symptoms with those of the traumatic case, and afterwards I will read you an account of the autopsy.

Frederick L., æt. 40, and a native of Philadelphia. From his own statements we learn that his parents were healthy; that he has never been addicted to intemperance in drinking, nor to excessive venery; he has never had a chancre; has several times fallen from giddiness, but was never afterwards confined to his bed; for several years he kept an employment office in this city. He has been in the Philadelphia Hospital on two previous occasions, suffering only with general debility.

About one year ago there were sensations of numbness and tingling in the fingers and toes, but, though weak, he was able to continue walking around. This condition lasted about one week, when the symptoms disappeared.

In June, 1872, he last applied for admission to the hospital, and was then assigned to the out-wards, his only complaint being that of feebleness. In these wards he did the work of a waiter in the dining-room. In this capacity he was willing and efficient, but for several days prior to being confined to bed he spoke of a feeling of numbness in his legs, which sensation he said was creeping upwards from his feet.

On the morning of October 7, on getting from bed and attempting to stand he found his legs unable to hold him up. Accompanying this loss of strength there was a sensation of numbness and tingling in his feet, and also in his hands, as if they were asleep.

"October 11, 1872.—To-day he was transferred to the hospital proper. When taken into the ward, about 3 P.M., he was able to stagger a few steps, the nurse stoutly supporting him. While sitting on a chair he was able to remove his own stockings.

"October 12.—The man thinks there is no impairment of his mental faculties; yet he seems easily affected, readily shedding tears. He passed his urine last night involuntarily. On getting him out of bed, his legs were found utterly unable to support him. The arms also seemed weak. He said there were marked tingling and sensations of 'pins and needles' in the right hand and in the feet and legs. The left arm having been amputated below the elbow years previously, there was no alteration in the usual sensations of the stump. An induced current caused only feeble contractions in the muscles of the legs and of the arm. There was also marked loss of electro and general sensibility in the extremities. The bowels were constipated.

"October 13.—The loss of muscular power evidently increasing; and especially is this observable in the upper extremities. To-day he was ordered fifteen dry and six wet cups, to be applied along the entire length of the spinal column, and also to receive an effective dose of castor oil. In a few hours the bowels were freely moved.

"October 14.—The symptoms seem to have undergone no change since yesterday, excepting that he is less able to retain the contents of his bladder, and his

arm has become so weak that he is no longer able to feed himself.

"October 15.—The man has some cough, and states that for the last two nights he has, at times, had a great deal of trouble about his breathing. Posteriorly his chest is full of sonorous râles. The heart-sounds are normal. He cannot now, without assistance, get his arm from under the cover.

"October 18.—Since the 15th there has been complete loss of control over the bladder, the urine dribbling away and not distending that viscus. The bowels have again become constipated. There is not absolute loss of all power in the lower extremities, but they are so very feeble they cannot be at all raised from the bed, and can be wobbled only a little. There is a similar, but less prominent, condition of the arms.

"The respirations have become exceedingly full, deep, and labored, numbering seventeen per minute. The pulse, though somewhat feeble, is quite normal. There are no febrile symptoms. Both lungs are filled with coarse sonorous râles. The sputum is somewhat purulent and bronchitic. His voice is exceedingly weak and husky, even whispering, but there is no laryngeal pain or soreness. The anesthesia, though very marked, is not absolute. Reflex action in the legs is much diminished. The muscles of the legs respond but very sluggishly to a strong current of the second coil.

"8 P.M.—Respirations have become gasping and very feeble, but very labored. He has an anxious, distressed expression, and complains much of dyspnoea, saying that he is suffocating. These symptoms become aggravated if he is not kept in a semi-erect position. He has not been able to swallow for several hours. Being given a spoonful of milk, he was unable to swallow it, and the attempt brought on a fit of choking and intense dyspnoea.

"About half an hour afterwards he died, without presenting any additional symptoms, his mind remaining clear to the end.

"During no period of the attack have there been pains or other symptoms of rheumatism, nor was there a prior history of this affection. There have not been any convulsions or tremors of any kind; no rigidity of the muscles, no delirium, and no coma."

As I have read this case, no doubt you have perceived the resemblance of the symptoms with those of the man who was injured in the coal-car, and noted that the differences are simply of degree, the most important arising from the cord being involved higher up, in the last case. Let us now look at the autopsy, and then I think you will agree with me that our other patient is suffering from traumatic congestion of the cord, probably with a small amount of effusion.

Autopsy, fourteen hours after death.—On exposing the dura mater of the cord, the veins beneath it were seen to be much congested, and on pressure along the cord there was a distinct wave of the serous fluid within its membranes, this being evidently much increased in quantity. There were no bright spots of injection on either the cord or its membranes. There was no exudation of lymph nor other evidence of inflammation. The veins of the medulla were enlarged. The rest of the encephalon and its membranes seemed healthy.

Both lungs were much congested. The other thoracic and the abdominal viscera seemed quite normal. The kidneys were examined microscopically by Dr. R. M. Bertolet, who kindly made the following report:

"The kidney of the spinal case did not present any infiltration of the interstitial tissues, nor thickening of the tunica propria. The epithelium of the tubules was,

however, swollen and cloudy from the deposition of granular matter in its protoplasm. Could easily see the nuclei upon the addition of acetic acid. This cloudy swelling does not positively indicate a hyperæmic condition of the organ during life, since it may be merely a post-mortem change."

It would be foreign to my purpose to say much about the treatment of congestion of the cord. Suffice it to point out that death occurs by a gradual increase upwards of the congestion, by a gradual rising of the exudation and consequent involvement of the respiratory nerves, which the most active measures may fail to prevent; and that the best treatment is free local bleeding from the neighborhood of the anus, the use of dry cups over the spine, and the exhibition of large doses of ergot (f $\frac{3}{4}$ ss to f $\frac{3}{4}$ j); after a time electricity may be used, especially in the form of faradaic currents, to maintain the life of the muscles affected.

[Under the treatment noted, the traumatic case made a good and rapid recovery, and in a few weeks left the hospital, well. He suffered no inconvenience, save some headache from the use of three fluidounces, daily, of the ext. ergot. fl.—H. C. W., JR.]

The following case, occurring in my private practice, will serve to illustrate another form of traumatic spinal affection constituting a variety of the so-called concussion of the spine, besides being of no little interest as presenting such distressing and varied sensory illusions.

Mr. T., æt. 40, a gentleman of temperate habits and good health, fell on his door-steps, striking with great violence across the lumbar region. Considerable pain and stiffness ensued, but no trouble beyond what would be expected. He attended to business as usual, and appeared to be recovering from the effects of the fall. A few days subsequently, however, while lying on the bed and engaged in reading, he was surprised by a sort of spasm of the genital system, followed by an ejection of semen. In two or three days this happened again. These experiences were entirely disassociated with sexual thoughts or excitement, and were very distressing. A few days later, and when the more immediate effects of the fall had quite disappeared, a business trip to New York and Boston was undertaken. The motion of the cars, and subsequently of the boat, produced a most tantalizing discomfort in the genito-urinary system,—a mixture of sensations referred in part to the bladder and in part to the seminal tract, a disposition to urinate, and a feeling as of orgasm prevented. The whole nervous system seemed as though transformed into a genito-urinary apparatus. Involuntary spasmodic movements, as of orgasm, continued and increased in severity, without erections, until they resembled the efforts of a dog in vomiting. In this way the night was spent, sleep being impossible, although some slight relief was obtained by sitting in a basin of cold water. During the next few days the same symptoms occurred at intervals, lasting from one to three hours; the intermissions being intervals of absolute freedom from them. After the lapse of ten days the return trip to New York developed them in all their horrid intensity. In New York getting a night's sleep, he felt the next morning a sense of elasticity and sprightliness which was unusual for him even when well. But the ride in the cars from Jersey City to Philadelphia again developed the symptoms to such an extent that sitting still was not to be thought of, and the time was spent in the water-closet in vain efforts to obtain relief by pressure, by constant at-

tempts at urination, etc., although the bladder was empty. Reaching home almost crazed by the irritation, which had now become constant, his strength was so far exhausted that he was just able to crawl up-stairs and into bed. The hyperæsthesia extended to the rectum, to the thighs, to the abdomen, and to the back. Sensations as of an evacuation of the bowels, of the bladder, or of seminal emissions, were constant. Sometimes the parts felt as if exposed to a hot fire, and the skin covering them would seem as if it would break from dryness when bent. These sensations would alternate with those of such an exalted sensibility of one part or another, or of all the surface from the waist to the knees, that contact with clothing was torture almost enough to drive him mad. Then would follow relaxation, accompanied with a dreadful feeling of absence of vitality,—to the consciousness, not to the touch,—and local sweats which were marked by a peculiar acid odor. With all this there were feelings as though the urethra was being tickled with a feather; as though seat-worms were passing in and out of the rectum; as though the scrotum was made of wires which were being twanged, or of tubes through which water was flowing. Every sensuous thought had to be avoided: an exposure of a female leg on the street would almost cause a tetanic spasm. This condition of things lasted for more than three years, with intermissions or modifications of one, two, or three days, every two or three weeks. In these intervals sexual relations were normal, and always followed by relief, and even sometimes were sought only because of the relief afforded. At other times sexual thoughts provoked a hyperæsthetic condition of the genital system, on which such an intimation acted as water is supposed to act on a mad dog. At no time was there priapism, and at no time a loss of power, but at times a sensitiveness which could no more bear a sexual thought than an inflamed eye could bear the noonday sun. On one of these occasions the touch of a female's hand was so acutely and intensely painful to these sensibilities that she was entreated to leave the room instantly.

During the first three years alluded to, various other anomalous and distressing symptoms appeared with more or less frequency, as though he were trying to walk with a large, soft ball—as of a cocoanut in size and a soft orange in consistency—held between the thighs, or of a wad of cotton pressed tightly between the nates; of a twisted condition of the muscles of the legs, which twisted tighter at every step; of his drawers having become unfastened at the waist, and dropping down entangling his legs; of the feet being cushions; of the pavement giving as it does when the frost is coming out of the ground; of the feet being buried in sand or grain; of draughts of air and flowing of water from the feet upwards; of still walking after stopping in a walk; of being lifted in the air by the effort at defecation, or in response to a sneeze or cough, or an ejection of flatus; of the chest being bound in hoops; of the muscles of the perineum being grasped from within and raised and twisted; of being lifted from the bed and floating in the air. Sleep always afforded relief. Ale would also bring relief; though sometimes large quantities were required. No medicine seemed productive of any good.

Nearly seven years have elapsed since his fall. There has been a gradual improvement, with the exception of aggravations from unusual mental or physical exertions, or from changes in the weather.

The pathology of this case, gentlemen, is, I believe, one of chronic congestion, or possibly slight nutritive changes, of the nerve-cells,—chronic irritation, if you like the term, involving the posterior or sensory portions of the lumbar cord; strictly localized, and not affecting the motor centres.

Be this as it may, the case illustrates the point of the present lecture, namely, that chronic nutritive changes are the real lesion in the so-called concussion of the cord.

This idea is not a new one at all. Abercrombie and others recognized full well the truth that injuries produced chronic spinal inflammation. It has been reserved for modern times to speak of these cases as concussion of the cord; and, as a false name will often beget a false idea as to pathology, it is against the use of the term at present customary that I desire to protest. Remember, it is not merely congestion, as in the case described to-day, it is not merely chronic spinal meningitis, as in cases reported by Sir Astley Cooper and by Abercrombie, but any form of spinal inflammation, acute or chronic, that may arise from injury. Recognizing the true nature of these cases, you will have no especial difficulty in their treatment. Time will not allow me to go into details upon this point, but it evidently follows from what has been said that each case should be treated independently of its cause, precisely as would a similar spinal affection arising from any non-specific source.

ORIGINAL COMMUNICATIONS.

SOME CASES FROM MY OBSTETRICAL NOTE-BOOK.

BY H. E. WOODBURY, M.D.

CASE I.—*Twin conception—Loss of one fetus in the third month, by abortion—Delivery of the other still-born, in the eighth month, by version.*—In the latter part of 1868, Mrs. B., a lady of prepossessing appearance, called to consult me relative to "a very peculiar state of things," and set forth her case as follows: "I am the mother of two children, both living. About two months ago, being in the third month of pregnancy, I had an abortion. I know the child came away, for I carefully examined it, and it was about the size of my forefinger. I kept very quiet in bed for some days, and suffered no inconvenience worthy of mention from the event. During the last week or two, I have felt frequent and distinct movements, as a woman does when she has quickened. I have consulted two of our most experienced physicians, and they assured me that if I had miscarried so recently I could not be pregnant, but that I was suffering from a nervous affection resulting from the miscarriage. Now, doctor, I have called to see you, because I am not satisfied as to my condition. Is it not a strange case?"

I remarked that while it might seem a strange case to her, to me it was a plain one,—one of rare occurrence, but one, nevertheless, that may, and sometimes does, occur. "To state it briefly, madam, you were pregnant: it was a twin conception; you lost one fetus by abortion; the womb contracted kindly, and retained the other intact. This second fetus quickened in due time, and you now feel its movements. At term, if not before (if your statement be correct), you will have satisfactory confirmation of my diagnosis in your case."

She expressed herself as satisfied with my solution of what had seemed to her "a strange enigma," and complimented me upon my readiness in unravelling the mystery.

The same evening her husband called on me. He stated that I had relieved his wife of much anxiety, and desired to know upon what grounds I based my opinion of her case. Had I ever met with such a case? I informed him that I had not; but, taking Ramsbotham's "Obstetrics" from my bookcase, I turned to page 585, and read, "Numerous cases are on record where one [*i.e.*, fœtus] has slipped away, as it were, during the early weeks of pregnancy, being expelled with scarcely any uterine effort, and another has been carried on to maturity." "I am sure that is her case," he remarked; "and we shall give you a chance to confirm it."

Time wore on, and I had not seen the parties for three months, when one day a messenger came for me in haste to attend a lady in labor. I obeyed the summons, and, on entering the lying-in-chamber, recognized the lady who had consulted me three months before. "You were right, doctor," she said; "and I would not let any one but yourself take care of me, for I anticipate a hard time, as it is premature." In this she was correct; for, after having been in labor forty-eight hours (with hard pains much of the time), the os was only dilated to the size of a shilling-piece, and the pains ceased from sheer exhaustion. The os was hot, dry, and unyielding. In this crisis, having lost much sleep during the two nights I had passed with her, I deemed it best to have counsel and assistance in the case. One of the physicians whom she had consulted previous to calling on me, met me in consultation. We determined to give chloroform, dilate the os, and deliver by version, at once. This was done; the child being still-born. On the morning of the third day after delivery, the mother had four or five convulsions. These yielded promptly to treatment,—viz., heroic doses of tinct. gelsemini; two doses sufficing to check them entirely. From this time she made a good recovery, and soon after left the city. I have since learned that she gave birth to a living child about two years after her former confinement, and that the labor was normal and of short duration.

Case II.—Twin conception—Abortion—One fœtus retained four days after the expulsion of the other.—In May, 1869, Mr. P. came for me, in haste. His wife, being in the third month of pregnancy, was taken, at an early hour in the morning, with violent pains, as of labor. I found that his apprehension of an abortion was well grounded; and in two hours after my arrival a small fœtus was expelled. A digital examination was now suggested, in order to ascertain if everything had passed and if the os was contracting. From hypermodesty on the part of the patient, this was refused. It is my rule never to leave a patient under such circumstances without first having assured myself, so far as is possible, that all is right. My rule was broken on this occasion.

Calling the next day, she informed me that she had suffered very much from "after-pains," but still refused to be examined. I prescribed a few grains of Dover's powders, and left.

On the fourth day she said to me, "Doctor, we have a good joke on you." I rejoined, "Perhaps the joke is rather on yourself: it surely is, if you have expelled another fœtus." She then produced, in a napkin, a fœtus nearly twice as large as the first one, saying, "It came away about two hours ago." I gave her a short lecture upon her duty to her physician, as well as to herself, referring to the fact that if she had permitted me to perform my entire duty she would probably have been relieved of the "after-pains" she had suffered for more than three days, and not have incurred the risk of a hemorrhage that might have occurred, although it did not in her case. Her recovery was rapid and complete.

Case III.—Retention in the uterus of a portion of the placenta for about one year.—Mrs. M., one of my patients, went home (to New York) in order to be under her mother's care during her confinement. She was absent about three months, and on her return her husband desired me to see her, as she seemed to be suffering from the effects of her confinement. Being anæmic and evidently debilitated, tonics and chalybeates were prescribed. Five months after the birth of her child the catamenia appeared, and her general health seemed much improved. She was regular for about three months, then ceased to menstruate, and believed herself to be pregnant. Pain, nausea, malaise, and nervous excitability were prominent symptoms in her case. There was enlargement of the abdomen, and she appeared like a woman three months pregnant. She suffered so much that I finally concluded to examine with the sound and ascertain if such was the case. I was truly astonished when, notwithstanding the almost unmistakable indications of pregnancy, the sound passed freely, not meeting with any obstruction for a distance of more than two inches into the cavity of the womb. I assured her she was not pregnant, but confess that the discovery of this fact puzzled me.

Surmising that this might be a case of polypus uteri, I prescribed liquor of ergot, in order to force some portion of the tumor into the cervix, and thus clear up my diagnosis. This was faithfully taken until its full effects, as evidenced by the pains resulting from contraction, were established. At this stage I concluded to suspend all treatment for a season, and rely upon the expectant plan. Three days later a mass passed from her, which she sent to me for examination. It was of the size and shape of a hen's egg. Passing through its centre, lengthwise, was an opening about the size of a small goose-quill. The outer surface seemed to be membranous. On making a section of it, my opinion that it was a portion of the placenta and membranes retained at the time of labor was greatly strengthened.

In reply to my question, "Did you notice anything peculiar in your last labor?" she said, "On the third day after delivery, something hanging from the vagina annoyed me, and, taking hold of it, I tried to pull it away. This gave me great pain; so I desisted, and soon after noticed that it had disappeared." She further stated that the after-birth seemed much smaller and passed more readily than in her former confinement.

The facts and circumstances in this case justify me in arriving at the following conclusions, viz.: that a portion of the placenta and membranes was retained, and adherent at some point just inside the cervix. That pulling upon the membrane caused rigid contraction of the cervix, and consequent retention of the mass, moulding it to the shape of the uterine cavity. When the menstrual flow was about to return, she suffered from the symptoms of suppression, until an outlet was furnished by means of the canal found passing through the centre of the mass. That the subsequent obstruction to the flow resulted from a change in the position of the mass, or closing of its upper orifice. That the ergot caused the final separation and expulsion of the mass. Her recovery was perfect.

WASHINGTON, D.C., June 28, 1873.

ANÆSTHESIA.—M. Spessa has been enabled to cauterize, in coxalgia, with Vienna caustic, also to incise a fistulous canal in the neighborhood of the sternum, without producing any pain, by previously making a subcutaneous injection, near the part, of a solution of sulphate of morphia.—*Jour. de Méd., de Chir. et de Pharm. de Bruxelles.*

PARASITIC SKIN DISEASE CURED BY THE APPLICATION OF SULPHITE OF SODA.

BY FRANCIS L. HAYNES, M.D.

TINEA SYCOSIS.

CASE I.—December 8, 1872, J. R., aged 35, car-driver. He states that he contracted the disease at a barber-shop where he was shaved two months since. A customer of the same barber was at that time suffering from a similar disease, and two more have been attacked by it since. A few days after his visit to the barber's he noticed the appearance of red, itching spots around the hairs of the beard; after about ten days, dry, white scales began to form on these spots; a week since he used an irritating wash, which has greatly aggravated the disease.

Present condition.—The upper lip is quite swollen, and very tender. On either side is a large, white, prominent tuberos elevation. The remaining surface of the lip is covered with yellowish-white crusts, through which pass short brittle hairs, which are readily extracted by the use of the forceps. Hairs of the same description are scattered here and there over the elevations.

On microscopical examination, the hairs at and near their bulbs are found to be occupied by articulated and solitary conidia of trichophyton.

The patient was directed to keep the part constantly moistened, by means of pieces of old linen, with a saturated solution of sulphite of soda in water.

I did not see him again for six months, when his lip presented no appearance of disease, and was covered with a fine growth of hair. He stated that the use of the sulphite had removed the disease in about two weeks, and that the hair had immediately commenced to grow on the bare spots.

Up to the present time (June, 1873) the disease has not recurred.

TINEA SYCOSIS.

Case II.—J. H., aged 50, shoemaker, applied to me on December 1, 1872, suffering from a very aggravated attack of sycosis of two months' standing. Large white tuberosities, hard and very sensitive, were scattered here and there over the parts usually occupied by the beard and moustache. Yellowish-white scales occupied the intervals between the tuberosities. No traces of hair could be found on the affected parts. The disease had appeared shortly after the patient had been shaved by a barber. He was directed to use the same treatment as the above case.

December 3.—Greatly improved.

December 28.—The disease has nearly disappeared. One crust, four lines in diameter, and two or three pin-head tubercles, are all that remain. Continue treatment.

January 11, 1873.—One non-inflamed tubercle remains on the base of the chin. No appearance of hair. Discontinue treatment.

March 18.—Saw the patient for the last time. No traces of disease could be found. The beard was growing vigorously.

TINEA TONSURANS.

Case III.—January 30, 1872, H. O., aged 3, female, has had ringworm of the hairy scalp for six months. It is supposed by the relatives that she contracted the disease from a playmate who was affected by it.

A diseased spot one by one and three-fourth inches in extent exists on the vertex; another, two and a

half by one and one-third inches, over the right ear. Both are covered by dry, friable, dirty-yellow crusts, two or three lines thick, through which protrude a few straggling deformed hairs. On microscopic examination, numerous trichophyton conidia were discovered in the crusts and hairs covering the spots, also in the hairs immediately surrounding the spots.

The parents are directed to apply 'poultices continuously for two days, in order to remove the scabs.

February 1.—The poultices having proved ineffectual, the crusts are removed by the scissors, and the hair cut short over the entire scalp.

Treatment.—Apply poultices for twelve hours, then a saturated solution of sulphite of soda. The solution is to be used in this manner: A cap is to be made from old linen, which, after being moistened with the solution, is to be applied to the head. A second cap of oiled silk is to be superimposed, to prevent too rapid evaporation.

February 3.—Much improved. Spots very clean. Healthy hair beginning to grow in them. Continue.

February 11.—No appearance of disease. Hair growing vigorously. Discontinue treatment.

The patient had no return of the disease for six months, when, on a second exposure, she contracted it again. A repetition of the above treatment was followed by a speedy cure.

TINEA TONSURANS.

Case IV.—January 12, 1872, Peter C., aged 2 years, was brought to me, together with his three sisters. About two weeks ago a small moist spot appeared on the scalp. At the present time a diseased spot one by one and a half inches in extent exists on the vertex; it is covered with crusts, through which protrude a very few hairs. Scattered over the scalp are numerous similar spots of small size. The hairs on the diseased spots are short, brittle, and crooked; they can be extracted very readily, and without causing pain.

On microscopic examination of the diseased hairs, they are found to be irregular in outline; here and there the fibres are split; the ends are frayed out. They contain numerous conidia of trichophyton tonsurans.

Case V.—Mary C., aged 5 years, was attacked at the same time.

Case VI.—Anne C., aged 7 years, was attacked two months since.

Case VII.—Maggie C., aged 9 years, was attacked one month since.

All these cases presented the same symptoms, and the appearances of the diseased hairs were characteristic in all of them.

The same treatment was used as in Case III. The progress of the cure was slow, on account of want of care in keeping the solution constantly applied, and the absence of all attempts at cleanliness.

In two months, however, the disease had entirely disappeared in all the cases, and the hair was growing finely over the entire scalp.

THE URINE IN ADDISON'S DISEASE (*Revue des Sciences Méd.*).—Rosenstein reports in *Virchow's Archives* (No. 142) the results of the analyses of the urine of two patients suffering from Addison's disease. These analyses were made daily for two months, and always showed a considerable diminution in the quantity of urea excreted,—from twelve to twenty grammes in the twenty-four hours,—and a notable increase in the quantity of indican, which rose up to eleven or twelve times its normal amount.

NOTES OF HOSPITAL PRACTICE.

CASES OF OVARIOTOMY.

BY WASHINGTON L. ATLEE, M.D.,

Of Philadelphia.

Reported by J. EWING MEARS, M.D., of Philadelphia.

(Continued from page 661.)

CASE 242.—Multilocular ovarian tumor; slight adhesion; incision five inches long; recovery.

September 27, 1871, Dr. Atlee visited Florence, Alabama, for the purpose of operating on Miss T. K. She was 37 years old, and first menstruated at the age of fifteen years, having always been regular in every respect. Although rather delicate, she has always enjoyed pretty good health.

About two years before, she was aware that her clothing was becoming tighter about the waist. In January, 1870, she was seized with a severe pain extending from the breast to the pubes on the left side. This attack was repeated in May following. She supposed it to be an attack of indigestion, and went to Bailey's Springs, nine miles from Florence, under the care of Dr. Moody, and thought she was benefited. The menses were regular until June, 1870, when they were suspended until the spring of 1871, and after a return in March they were again suspended.

In October, 1870, Dr. H. A. Moody, of Bailey's Springs, tapped her, removing eighteen pints of opaque, thick fluid, darker than chocolate, which, after standing some time, adhered to the bucket on being poured out. After the tapping a tumor was discovered in the left hypochondrium and side, resembling an enlarged spleen in character and location. The tumor filled up the left side, and was thought to be an enlarged spleen.

The abdomen was pretty uniform in shape, and much larger than at full period of gestation. The only resonant point on percussion was over the left side and hypochondrium. The solid deposit in the region of the spleen seemed to have been transferred towards the right side. Fluctuation was more or less distinct, but interrupted. The pelvis was free; uterus central and movable, and admitted the sound three inches.

Diagnosis.—Multilocular ovarian tumor.

Drs. J. T. Hargraves, James W. Stewart, John M. Hays, John Lorence, and H. A. Moody, assisted in the operation. The patient recovered.

Case 243.—Multilocular ovarian tumor; extensive parietal, omental, and hepatic adhesions; incision five inches in length; recovery.

September 23, 1871, Dr. Atlee examined Mrs. J. S., of Edina, Knox County, Missouri. She was 27 years old; first menstruated at the age of fourteen, and had always been regular. She was married at the age of twenty-one; had one child five years ago, an easy parturition, and good recovery. Lactation was free. She nursed her child fourteen months, and her menses returned in twelve months after the birth of the child.

She had enjoyed excellent health until January, 1868, when, on rising in the morning, she became quite dizzy, and sick at the stomach, and so sore all over that she was scarcely able to move during the day. This condition was followed by great pain in the right side and in her bowels. This continued until about eight o'clock P.M., when the pain became so intolerable that Dr. White was summoned, and it was not until two o'clock next morning that she was relieved. The suffering continued for one week, after which she enjoyed pretty good health for about two years, when she was seized again with the same pain, and confined to bed for five weeks. After recovering from this attack a tumor as large as the fist, and hard, was discovered in the right side. This

tumor always became sore on taking cold. It did not increase in size for one year, but in January, 1869, after an exposure, it began to grow, and increased rapidly afterwards. Her former weight was 132 pounds; now she is greatly emaciated. The lower extremities have been swollen since June; the left one swelled first.

She measures round the waist $34\frac{1}{2}$ inches, round the umbilicus 51, from sternum to umbilicus 16, to pubes 28, and between the ilia $33\frac{1}{2}$ inches.

The abdomen is very large, and covered with numerous dark-colored veins. It is pretty uniform in shape, although larger on the right side. The umbilicus is nearly obliterated. Fluctuation is very distinct. The tumor appears to consist mainly of one large cyst, with multilocular secondary cysts in its walls. The pelvis is free; the uterus is movable; the sound enters $2\frac{1}{2}$ inches. Ovariectomy performed October 4, 1871. Drs. Burpee, Mears, W. Lemuel Atlee, Hoffman, Goodman, Packard, Millard, Forney, Goodell, and Sherwood, and Mr. Robinson, medical student, assisted.

The uterus was small and healthy; the intestines vascular; the omentum engorged with very large vessels; the parietal peritoneum very much thickened.

The tumor consisted of the right ovary. There was one large cyst, with secondary cysts in its walls; weight sixty pounds.

An excellent recovery followed. A letter dated April 2, 1872, says "she feels as well as ever."

TRANSLATIONS.

NEUMANN'S EXPERIMENTS UPON THE LYMPHATICS OF THE SKIN.*

BY LOUIS A. DUHRING, M.D.,

Of Philadelphia.

THE work of which the following is a brief abstract has quite recently appeared, and as the lymphatic system of the skin is a subject, comparatively speaking, unknown, the results of Neumann's investigations in this direction are here presented. Very little attention has heretofore been bestowed upon these vessels as they exist in the skin, and still less have they been studied in connection with the pathological changes of the corium.

It is to be hoped that the present series of experiments will be followed by others, with reference particularly to the condition of this system of vessels in certain diseases of the skin.

Dr. Neumann begins his observations with a review of the results obtained by previous investigators, referring in detail to the various methods and means employed for the injection of the tissue.

The plan adopted by Neumann for injecting the skin was a modification of the methods of Hyrtl and Teichmann. The epidermis and the corium having been well macerated in a mixture of alcohol, acetic acid, and water, a fine-pointed needle was thrust into the skin to the depth of a line or less. Into this little hole a delicate tube was inserted, and the injection then made by means of a small brass syringe. Two mixtures were used for the injection; one being composed of a carmine solution with glycerin, and the other carbonate of lead rubbed up with glycerin.

According to Neumann, the corium of the human integument is plentifully provided with lymphatics. They were demonstrated as existing in the papillæ, in the

* Zur Kenntniss der Lymphgefäße der Haut des Menschen und der Säugethiere. Von Dr. Isidor Neumann, Docent an der k. k. Universität in Wien. Mit 8 chromolithographirten Tafeln. W. Braumüller: Wien, 1873.

upper and lower layers of the corium, in the subcutaneous and adipose tissues, and also in connection with the sebaceous and hair follicles, as well as the sweat-glands. Their presence in the papillæ was recognized in both physiological and pathological preparations. For purposes of physiological study the fingers and toes of new-born children were found to be particularly suitable, care being taken to inject also the blood-capillaries with some other colored injection-material. The papillæ are supplied by these vessels, either in the form of simple tubules, or, as is more usually the case, as loops which turn upon themselves about half-way up the length of the papillæ. These loops were beautifully exhibited in a series of papillæ. In the remaining portions of the corium they were distributed in such varied relations that it would be impossible to describe any definite arrangement. But it was especially noticeable that there existed a superficial and a deeper-seated stratum of vessels, which were bound in communication through a delicate network.

In addition to the fingers and toes of young children, where the lymphatics are most easily studied, Neumann mentions the scrotum, labia majora, perineum, prepuce and glans, and the skin of the internal malleolus, as being well adapted for examination. With the abundant available material at hand which the Vienna General Hospital liberally offers to any one pursuing scientific investigation, Neumann was enabled to examine the condition of the lymphatic system of the skin in a number of diseases, among which are mentioned examples of acute and chronic eczema, variola, Hunterian induration of the prepuce, cicatricial tissue after extirpation of sarcomas, and psoriasis palmaris and plantaris. In a typical case of eczema of the scrotum the papillæ were found very much enlarged and the lymphatic vessels likewise greatly increased in size. The lymphatics in the altered corium beneath were also strongly developed.

In five cases of acute eczema of the scrotum (three being spontaneous and the remaining two artificial eczemas) which Neumann had the opportunity of studying, the injections were made into the tissue, starting in the healthy skin just beyond the line of disease. Nothing, however, of interest was observed in these experiments, excepting that the sound skin was more easily injected than the diseased portion. It was found that in variola-pustules the upper stratum of the lymphatics was completely destroyed, while the deeper layer remained intact. In a case of Hunterian induration Neumann discovered that in the middle of the characteristic granulation-tissue of this disease, in which the normal corium had, in part, been destroyed, the lymph-vessels were present as thick, stout ramifications, stretching up into the enlarged papillæ and down as far as the sweat-glands.

In the experiments with the cicatricial tissue the injection was likewise made, starting from the adjacent sound tissue. The lymphatics here, few in number, were found to run more parallel, and were somewhat wider than normal.

The results of Neumann's experiments and observations may be summed up as follows:

1. The lymphatics of the skin present an enclosed tubular system, with independent walls, whose interior is lined with flat epithelium. These walls are nowhere interrupted by openings. There exists, therefore, no communication with the so-called juice-canals, or with other interspaces of the skin. Neither can spaces anywhere between the epithelium be noticed, not even in examples of disease where there exists an enlargement of these vessels.

2. The relation of the blood- and lymph-vessels is only constant to the extent that the former are always found much nearer the surface than the latter. The

branches of the lymphatics, together with their meshes, are found spreading themselves in the deeper tissue in all directions. Nowhere, however, within a lymph-tubule could a second vessel be detected: so that there can be no ground for considering the question of invagination.

3. The lymphatics form two close and separate networks in the corium, the deeper being the more extensive of the two. Their walls are markedly capable of extension. The more superficial vessels are in general thinner; the deeper ones are thicker, and, like the first, are, to all appearances, without valves. Only among the subcutaneous vessels is it possible to demonstrate the valves plainly.

The larger lymphatics possess a number of branches with blind endings, which are of variable calibre. The lymph-vessels make their way into the papillæ of the skin, partly in the shape of single tubules, and also in the form of loops.

4. The appendages of the skin, as the hairs, hair-follicles, and sweat-glands, possess their own lymphatic capillaries situated about their periphery, but they do not enter into the follicles. The aggregations of fat are also surrounded by lymphatics. The vessels were found to be greatly developed in the subcutaneous tissue.

5. The number of lymph-vessels of the skin was found to vary according to locality. They occur in greatest numbers about the scrotum, labia majora, palms of the hands, and soles of the feet. In pathologically altered skin, an enlargement of the vessels was at times demonstrable.

In ulcerative processes the lymphatics are, in part, destroyed, though they may be regenerated. They occur only sparsely in cicatricial tissue. No vegetations were observed upon the walls of the vessels.

The brochure which we have been considering is accompanied by eight superb chromo-lithographic plates, the work of Dr. Heitzmann, of Vienna, well known for his success in producing correct drawings of microscopic pictures. The plates illustrate in a most satisfactory manner the conditions described by Dr. Neumann, and must remain a permanent contribution to the anatomy of the lymphatic system of the skin.

THE PATHOLOGY, ETIOLOGY, AND TREATMENT OF STUTTERING.

BY R. M. BERTOLET, M.D.

A BROCHURE upon the above subject, by Dr. R. Coën, has made its appearance (Wien, 1872). While the earlier writers attribute the affection to organic malformation of the vocal and speaking apparatus, others, on the contrary, viewed stuttering as a disturbance of the nervous system and of the central organ; latterly the disease has come to be regarded as the result of disturbed function of the respiratory organs. Coën is of the opinion that stuttering is to be regarded as a secondary manifestation and result of another pathological condition of the organism, namely, of anomalous size of the respirations. He was led to this view by the observation that the disturbance is most noticeable in the formation of those sounds which require a greater immediate action of the respiratory organs,—hence in the mute consonants; while the disturbance of speech is rarely or never manifested in uttering vowel sounds. In the formation of the mute sounds the vocal fissure is widely opened; the atmospheric pressure in the cavity of the mouth is then equal to that in the lungs, and the apparatus of the mouth must be sufficiently firmly approximated to give resist-

ance to this pressure. In the stutterer the atmospheric pressure in the lungs is diminished in consequence of defective innervation and consecutive disturbance of function; the apparatus of the mouth is, on the contrary, normally innervated, hence also disposed to offer a vigorous resistance to the irregular atmospheric pressure of the respiratory organs. If the air under such circumstances has to overcome a marked resistance, then this occurs only tediously, and the sound is pronounced at one time with difficulty, at another weak, indistinctly.

A disproportion between the diminished atmospheric pressure and the normal activity of the closing organs then ensues, and only after great effort is the air-pressure in the lungs increased, the firm closure opened, and the sound produced vigorously. In this manner is also explained the well-known fact that stutters pronounce vocals quite well; that they can sing, declaim, speak loudly and slowly, without their defect being in the least manifested.

Stuttering differs materially from stammering: the latter consists in the inability to pronounce certain sounds and words completely and correctly, which can only arise as a result of malformation of the organs of articulation. It differs from stuttering in that it persists under all circumstances, excludes nervous and spastic conditions, and is evident also in singing and declaiming. According to Coën, the primary affection of stuttering must be sought in a central affection of the oblongata or in a spinal irritation, or in a combination of these two pathological conditions, whereby the activity of the respiratory organs is interfered with as a result of the disturbed innervation; i.e., the atmospheric pressure in the lungs is diminished, and the action of the diaphragm becomes irregular.

That mental affections and increased spinal irritability are the causes which may produce stuttering is shown in its instantaneous appearance during the age of puberty upon injuries to the head and spine, in severe nervous affections, and especially from strong and rapidly acting irritants upon the nervous system. Here also are classed defective nutrition, abnormal formation of the thorax, debility of the respiratory muscles,—conditions which are induced by the primitive affection.

The treatment recommended is a methodically applied gymnastics of the lungs and electricity. In order to increase the force of the lungs, a forced inspiration and expiration, interrupted at short intervals, should be practised; in this manner the slow innervation is quickened and the tonicity of the lung raised. In order to remove the disproportion between the diminished atmospheric pressure and the normal articulation-muscles, the patient is ordered to make a deep inspiration before pronouncing each word of some selected sentence, so that the column of air is compelled to enter with force into the thoracic cavity; this occurs best when the patient inspires deeply with the teeth firmly pressed together. Then the word is spoken loudly and slowly at regular beaten intervals. After some practice an inspiration need only be made after every second or third word.

The indications for the electric treatment consist, first, in strengthening the inspiratory muscles by galvanization or faradization of the branches of the phrenic nerve and of the cervical plexus supplying the respiratory muscles. A second indication consists in combating the spastic condition by strong voltaic alternations. At the same time, a general water-cure and forcible friction (Swedish Heilgymnastic) of the respiratory muscles act against the dynamic causes which increase the affection. By the hydropathic cure it is claimed that a more cheerful psychical mood of the patient is induced, during which the depressing evil is forgotten and the hope of a recovery given room, an influence not to be despised in the treatment even of stuttering.

SUCCESSFUL EXTIRPATION OF KIDNEY.

By Prof. SIMON, of Heidelberg. Translated from *Schmidt's Jahrbücher*.

BY DR. WILLIAM ASHBRIDGE.

THE patient who was the subject of this operation was a woman, 46 years of age, who eighteen months previously had been operated upon for the removal of an ovarian cyst, in the performance of which, owing to adhesions, it became necessary to remove a large part of the uterus. At the same time the left ureter was cut so that the surfaces of the wound were constantly inundated with the urine from the kidney of that side.

In spite of this, the patient recovered, but in a lamentable condition, suffering from a fistula in the walls of the abdomen, into one side of which the vagina and the canal of the cervix uteri opened, into the other side a fistula of the left ureter. The entire secretion of the left kidney found vent partly through the fistula in the abdominal wall and partly through the vagina. Professor Simon now attempted to restore the continence of urine. This he endeavored to effect by two methods before resorting to extirpation of the kidney. Twice he attempted a plastic operation, which failed in both instances, owing to the constant flow of urine, and twice he cauterized the fistula with argenti nitras. This latter method had to be given up, owing to the urgent symptoms which followed the retention caused by it. Upon the failure of these attempts nothing remained but the extirpation of the kidney.

The operation was commenced by a cut through the skin and superficial parts, about four inches in length. This cut was made on the outer side of the sacro-lumbalis muscle, in a perpendicular direction, beginning at the eleventh rib, and carried down to the middle of the space between the twelfth rib and the crest of the ilium. The next step was the exposure of the kidneys, the guides being the twelfth rib and the edge of the sacro-lumbalis muscle. The various fasciæ of the part and the intervening muscular tissue having been cut through, the operator at length arrived at the gland lying in its bed of fat. The next step—the separation of the gland from its surroundings—is described as the most difficult; the operator has to work under the rib, and must be careful to use only the finger or blunt instruments, to avoid the danger of a profuse hemorrhage from an injury to the parenchyma of the kidney. All the parts entering into the hylus must be ligated, either altogether in one ligature, or divided into two portions with two.

The course of the wound towards healing presented nothing remarkable; an attack of erysipelas and two attacks of diphtheritic exudation on the surface were the only untoward circumstances.

The ligatures did not come away until the beginning of the sixth month; but long previously the patient had left her bed, and was performing the duties of nurse in a military hospital in the early part of the late Franco-Prussian war, and two years after the operation she was still enjoying uninterrupted good health.

Accurate observations on the urine were made during recovery, and Professor Simon concludes that the extirpation of one kidney has no perceptible influence on the health of the patient. He also thinks that the remaining kidney can increase in size, remain of a normal size, or even be exceptionally small.

In experiments made upon dogs he found a vicarious growth of the remaining kidney beginning a very short time after the extirpation.

[In the first number of the *Philadelphia Medical Times* there is an allusion to the above case, containing a promise from Prof. Simon of a full report. Of this report the above is an abstract.—ED. P. M. T.]

PHILADELPHIA MEDICAL TIMES.

A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, JULY 26, 1873.

EDITORIAL.

THE SURVIVAL OF THE FITTEST.

A CURIOUS case of the application of the principle of natural selection under artificial circumstances is now progressing in our city. As every one knows, until the last year or two we have suffered in Philadelphia from a plague of "measuring-worms," which even Egypt in her palmiest days might have envied.

Some enterprising genius suggested the importation of English sparrows. A diet of worms resulted,—a diet which ended our plague. But the pest is coming upon us in a new form. The caterpillar of the moth *Orgyia leucostigma* opens his eyes a little later in the season than his friends the measuring-worms; consequently, for meals he in former times found the luxurious leaf-banquets in our public squares looking like the remains of an over-night club supper, and—didn't prosper.

Thanks to his hairy coat, the sparrows don't take a fancy to him; and, consequently, the measuring-worms being put out of the way, and the leaves allowed to grow, he is prospering and rapidly multiplying under the stimulus of food, good, abundant, and cheap. At present, very many trees in this city have again put on the familiar, woe-begone look of old, hiding their misery with the merest tatters and shreds of leaves.

"But the new-comer doesn't drop on you!" Doesn't he, though? If he does not drop he crawls, or gets on some way or other; and the man who has felt his long hairs tickling his neck, struck for

a fly, and found in his hand a bare and *burst*ed carcass, on his shirt-collar a stain, and down his back a bunch of tickling hairs, will vote the "survival of the fittest" in its latest form an unmitigated nuisance.

In order that our readers may avenge us on some of the mothers and fathers of these pests, we add a description of the perfected individuals as they will appear shortly:

Females wingless, or with merely two little wings like scales on each shoulder. Males with large ashen wings, crowned by wavy, darker bands on the upper pair, on which, moreover, is a small black spot near the tip, and a minute white crescent near the outer hind angle.

WE call attention to the following circular.

The work that Dr. Butler is engaged in is, we think, of national importance and interest, and we cordially recommend immediate compliance with his request:

"Circulars calling for information for the Medical Register and Directory of the United States are being rapidly sent out, and this portion of the labor will soon be completed. It is earnestly desired that the responses be as prompt and as full as possible. *It is important to physicians, who have any education or standing, that they appear properly on this record*, as the work will be one of permanent value and will be constantly referred to. The forms containing the Directory of the first set of eleven States and Territories (Alabama to Georgia, alphabetically, inclusive) are now in the hands of the printer, and there are but a few days in which information can be inserted in those pages.

"Officers of public medical institutions of *all kinds*, hospitals, asylums, dispensaries, colleges, medical societies, etc., are particularly requested to furnish us with lists, catalogues, announcements, etc., in order to give brief histories of these institutions, and for use in perfecting the Register and Directory in all its parts.

"It is intended that the work shall be exhaustive, and as nearly *correct* as may be, and it will be issued as speedily as possible; but the labor is immense, and the work is delayed by the want of promptitude in receiving replies to circulars and letters.

"S. W. BUTLER, M.D.,

"115 S. Seventh Street, Philadelphia, Pa."

DR. MORITZ HEINRICH ROMBERG died of chronic cardiac disease on the 16th ult. He was born at Meiningen, and graduated in medicine at Berlin in 1817. Dr. Romberg's life appears to have been a laborious one, since he held the position of medical officer to the poor of Berlin from 1820

to 1845, and in 1830 and 1836 he was director of the cholera hospital in the same city. In 1838 he was elected extraordinary professor, and in 1845 ordinary professor, to the university at which he graduated. He is an instance of a physician successful in a special branch of medicine although doing a more or less general practice and writing upon other subjects. He was the author of a work on cholera, and of various contributions to the periodical press, but will be chiefly remembered on account of his treatise on the "Nervous Diseases of Man," which was first published, in three parts, in 1840, 1843, and 1846, and was in 1853 translated into English by Dr. Sieveking for the late Sydenham Society. At the date of its appearance it was undoubtedly the best book extant upon the subject upon which it treats.

AS the importance that India is assuming as a tea-producing country does not appear to be generally known, the following table of English imports will probably surprise some of our readers. It is taken from the *Food Journal*:

Year.	China and Japan.	India.
1864 . . .	120,284,000 lbs.	3,285,000 lbs.
1865 . . .	120,345,000 "	2,510,000 "
1866 . . .	120,213,000 "	5,133,000 "
1867 . . .	122,682,000 "	7,084,000 "
1868 . . .	118,480,000 "	8,132,000 "
1869 . . .	145,472,000 "	10,522,000 "
1870 . . .	141,500,000 "	13,149,000 "
1871 . . .	134,000,000 "	15,500,000 "
1872 . . .	147,000,000 "	17,164,000 "

DR. EDWARD WARREN, late professor of Surgery in the College of Physicians and Surgeons, Baltimore, Md., and most favorably known to the profession by reason of his testimony in the celebrated Wharton-Ketchum trial, has accepted the position of "Surgeon to the Staff of the Khedive of Egypt," with the rank of colonel, and the privilege of engaging in private practice in that country. His address is Cairo, Egypt, where he requests correspondence to be addressed. We cordially recommend Dr. Warren to the friendship and professional patronage of our countrymen who may be visiting Egypt.

IN consequence of the illness of Mr. Erichsen, of London, having assumed a somewhat chronic character, he has decided on withdrawing from all active professional work for some time, and taking that complete rest which is considered necessary for his recovery.

DR. H. C. WOOD, JR., desires us to state that he is no longer connected with the *Quarterly Journal of New Remedies*, published by William Wood & Co., of New York.

CORRESPONDENCE.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR:—The admirable suggestion of my colleague, Dr. William Pepper, in regard to injecting the veins of patients suffering from the collapse of cholera with a warm solution of bromide of potassium, promises so much in the treatment of this terrible disease that I feel anxious it should be tried on a large scale, under the most favorable circumstances. I therefore beg leave to propose to the profession, through your columns, a slight modification of the strength of the liquid Dr. Pepper recommends, by which it shall correspond to the three-quarter per cent. salt solution, so constantly and successfully employed by microscopists as an indifferent medium for the examination of the blood and likewise all the tissues it normally bathes. As the result of numerous experiments performed yesterday and this morning, I find that a fluid composed of fifty-five grains of bromide of potassium (or bromide of ammonium, which might be preferable in some cases of the greatest prostration), and a pint of water, has obviously under the microscope a much less marked effect upon both the red and white corpuscles of human blood than is produced by stronger solutions, such as that of grs. xv to f ʒj.

Any one who has studied the rapid changes which occur in the red disks and white globules by the osmosis of denser or rarer fluids with which they come in contact, as described in my papers upon the structure of those cellular elements, published in the Transactions of the American Medical Association, will appreciate the importance of accurately regulating the strength of the solutions employed.

Very respectfully,

JOS. G. RICHARDSON, M.D.

1620 CHESTNUT STREET, July 16, 1873.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, JUNE 12, 1873.

THE PRESIDENT, DR. J. H. HUTCHINSON, in the chair.

DR. H. LENOX HODGE exhibited a *head and neck of the femur*, removed by excision, at the Children's Hospital, from a boy suffering from coxalgia. The operation was done this day, June 12.

The child is about eight years old. He has suffered from disease of the hip for three years. The head and neck of the femur are almost entirely absorbed. A

small nodule of cancellated structure is all that remains of the head. The neck is exceedingly shortened, and is diseased throughout. In this case there were bands of cartilage binding the femur to the sides of the acetabulum. These bands existed both on the exterior and in the interior of the joint.

Dr. WILLIAM PEPPER remarked upon the great difference in the mode and extent of the destruction of bone both in diseases resembling coxalgia and in others thoroughly unlike it, but suggested that in all instances there must be some solvent which removes the inorganic matter, and that when the bone has reached the condition of cartilage it undergoes softening. It was interesting to notice that there was here a tendency to the formation of new bone; and he desired to know of Dr. ASHHURST and Dr. HODGE whether they had frequently noticed a tendency to the development of osteophytes in this disease.

Dr. HODGE replied that, with regard to the formation of new bone, this was the only case of those in which he had excised the head of the femur that he had observed any tendency to it. Here there were bands of cartilage which in places were almost as hard as bone, and therefore difficult to cut with the knife. In no other case had he observed new bone or cartilage.

As regards the absorption of bone, this specimen exhibits what appears to be the usual course. First the articular cartilage disappears, then the compact substance, then the cancellated structure. In these cases there appears to be a far greater tendency to disease on the lower surface of the neck than on the upper. In extensive disease of the head of the femur, and of the lower surface of the neck, the upper surface of the neck is often healthy.

Dr. PEPPER said that the lower part of the neck of the femur was perhaps longer submerged in pus.

Dr. HODGE replied that generally upon excision of this joint none or very little purulent matter is found.

Dr. JOHN ASHHURST said that the seat of greatest destruction in hip disease varied with the particular part of the joint which was primarily implicated: thus, when the disease originated in the upper portion of the femur, it was easy to understand that the greatest destruction would be seen in the neck of the bone, and especially at its lower part, where the ligamentous structures were less dense than they were elsewhere; when the synovial membrane was first affected, the loss of substance would be chiefly observed on the convexity of the caput femoris; while in acetabular coxalgia, on the other hand, the pelvis would be most affected, and the thigh-bone only secondarily involved.

Natural efforts at repair were, Dr. Ashhurst said, less frequent in the hip than in the knee and elbow, where it was not uncommon to find ankylosis in one part of the joint coexisting with progressive caries in another. The process in these cases was properly called caries, or ulceration of bone, the term "interstitial absorption," as used by Paget, being more suitably reserved for that loss of substance, without suppuration, which was more common in the spine than in the articulations of the extremities. There was, no doubt, in either case a process of softening and conversion of bone into granulation-tissue, which might break down with suppuration or might undergo a retrograde change and lead to the formation of new bone.

Dr. R. M. BERTOLET said that the subject of the mode of absorption of the compact layers of bone-structure had been recently investigated by Wegner, of the Berlin Pathological Institute; that the important factor in the pathological process of bone-resorption seemed to be the myeloplaxes, or giant cells.

In a series of cases of rarefaction and absorption of the vitreous layer of the bones of the skull in consequence of diminution of the intra-cranial space from

various causes, such as hydrocephalus, abscess, tumor, etc., upon examining microscopically the plastic layer which is always found covering the outer surface of the dura mater immediately beneath the points of absorption, Wegner unexpectedly discovered imbedded in a hyaline mass numerous multinuclear so-called giant cells freely anastomosing with one another. Lacunæ and depressions were found in the overlying bone-structure, corresponding in size and shape with the variously shaped myeloplaxes beneath; so that, no doubt, the resorption is brought about by the growth of successive layers of these cells.

The origin of these giant cells seems to be from a proliferation of the connective-tissue cells of the sheaths of the blood-vessels which exist in the surrounding vascular structure. Observations made upon other portions of the skeleton showed that in all cases of normal or pathological bone-absorption there is always present a proliferation of the cellular elements of the sheaths of the neighboring vessels, be they derived from the dura mater, periosteum, or medullary substance; in other words, giant cells are necessary for the resorption of bone.

REVIEWS AND BOOK NOTICES.

A DICTIONARY OF PHARMACEUTICAL SCIENCE. By H. V. SWERINGEN. Philadelphia, Lindsay & Blakiston, 1873.

We have very little to say about this book, either for or against it, simply because all our spare time has been spent in trying to imagine of what use it can be to any one—why or wherefore it was created. Time spent, too, in vain: we give up the conundrum. The work consists of brief definitions of terms, accounts of preparations, formulæ, etc. Possibly it may be of value to the apothecary's apprentice; but, so far as the medical profession is concerned, we doubt the judgment of the publishers. Yet who can tell? The springs of the pecuniary success of books seem to us, like sundry other things, past finding out.

CHEMISTRY: GENERAL, MEDICAL, AND PHARMACEUTICAL: including the Chemistry of the United States Pharmacopœia. A Manual on the General Principles of the Sciences and their Applications to Medicine and Pharmacy. By JOHN ATTFIELD, Ph.D., F.C.S., Professor of Practical Pharmacy to the Pharmaceutical Society of Great Britain, etc., etc., etc. Fifth Edition, Revised from the Fourth (English) Edition by the Author. Philadelphia, Henry C. Lea, 1873, pp. xv., 606.

The favorable opinion which we expressed on the appearance of the previous edition of this deservedly popular manual has been indorsed on all sides, and to such good purpose that this fifth edition has been called for, and has been specially prepared by the author for the American student, by whom we are sure it will be thoroughly appreciated. It contains some seventy pages more than its predecessor, and the chapter on the general principles of Chemical Philosophy has been rewritten and somewhat extended. In every way the work is worthy of its established reputation; and the appearance of this American edition does credit to the enterprise of its publisher.

THE FIRST ENGLISH OBSTETRICAL WRITER.—The first English midwife who appeared as an obstetrical writer was Mrs. Jane Sharp, of London, whose work was published in 1671, under the name of the "Midwives' Book,"—a duodecimo of 418 pages.—*N. Y. Med. Record.*

SELECTIONS.

RUPTURE OF THE JEJUNUM, FROM A FALL, IN A GIRL ELEVEN YEARS OF AGE.

BY E. G. HOLLAND, M.D.,

London.

H. P., described as a delicate, lively, and "fly-away" child, fell, at 4 P.M., and struck the umbilical region forcibly against the edge of the stairs. She uttered a sharp cry, got up, walked up-stairs alone, vomited the contents of the stomach untinged with blood, complained that she could not draw her breath, and lay down and slept for half an hour. On awaking, she got up, walked about, talked freely, and, though seeming faint, made no complaint of pain. At 9 P.M. she went to bed, without supper, and slept soundly nearly all night. At 8 A.M. she walked in her night-dress to an adjoining room, and, without complaint of pain, asked for water and ice. At 12, she walked alone down-stairs and lay down on some chairs, and, complaining a little of pain, had some hot flannels applied, but requested them to be removed on account of the "weight." At 4 P.M., for the first time, she asked for something to eat, and, after taking a few mouthfuls, vomited, fell back pale, and died without movement.

At the necropsy, thirty-six hours after death, the abdomen was found to be distended with flatus and fluid, and the umbilical region discolored by bruising. The peritoneal cavity was filled with a sero-flaky fluid, deeply tinged with bile. The peritoneum generally was minutely injected, and more or less universally covered with soft lymph. The jejunum was ruptured for nearly half of its circumference, twelve inches from the pylorus, and presented a bruised appearance on each side of the rupture. On cutting open the gut, it was found healthy, and its mucous membrane upraised by extravasated blood in the neighborhood of the rupture. There were no adhesions externally around the rupture, no thickening of the edges, and the latter dovetailed when laid side by side.

Comments.—The interesting features of this case are—first, the slight cause; secondly, the apparent absence of any severe suffering or shock, so that the friends did not consider her ill enough to require medical attendance until the fatal syncope set in, twenty-four hours after the injury; thirdly, the sudden termination, with vomiting, after taking food.—*British Medical Journal*.

GLEANINGS FROM OUR EXCHANGES.

DETECTION OF THE BILIARY ACIDS IN NORMAL URINE.—Prof. Vogel gives the following simple process for the detection of the biliary acids in normal urine (*Fres. Zeit.*, 1872, No. 4; from *Tagebl. der 45. Versamml. deutsch. Naturf. u. Aerzte in Leipzig*, No. 5, p. 75). Four or five ounces of the urine should be acidulated with a few drops of hydrochloric acid, and shaken for at least an hour with chloroform. The chloroform, which has become brown and turbid, can be separated from the urine by decantation, or with a pipette, and rendered clear by shaking with six or eight centimetres of absolute alcohol. The mixture is then to be filtered, and the chloroform separated from the alcohol by means of a pipette, and allowed to evaporate on a watch-glass. If this residue, which has a bitter taste, be treated with sugar and concentrated sulphuric acid, a violet color is produced, first around the grains of sugar; this color

becomes changed to a brown in fifteen to thirty minutes (Pettenkofer's test).

In this manner Vogel found a small amount of the biliary acids in the urine of eight healthy individuals, and also in that of persons suffering from various diseases. In fact, no specimen examined failed to give the reaction for the biliary acids, when treated in this manner; and the color was more strongly marked in the urine of patients with disease of the liver (three cases of catarrhal icterus, one of carcinoma of the liver, and one of cirrhosis).

In order to be sure that this reaction was not caused by other substances, which may give a somewhat similar color with sugar and sulphuric acid (such as albumen, muscular fibre, various resins and oils, phenol, etc.), Dragendorff evaporated a litre of the urine of ten healthy individuals, varying in age from eight to fifty-five years, extracted the residue several times with alcohol, evaporated this, and dissolved again in water. This solution was precipitated with acetate of lead, dissolved in alcohol, and decomposed with sodic carbonate, carbonate of lead and glycocholate of sodium being the products of the decomposition, the latter remaining dissolved in the alcohol. From this solution the glycocholic acid was isolated, and its identity confirmed by Pettenkofer's test.

Not satisfied with this result, Dragendorff, by working with a large amount of urine (100 litres) in the above way, succeeded in obtaining a sufficient quantity of the acid to enable him to purify it by recrystallization and make an ultimate analysis of it, thereby proving beyond a doubt that the substance which thus reacts with Pettenkofer's test in normal urine is composed of the biliary acids, and that these do, under normal circumstances, find their way into the general circulation in small amounts, and are partially eliminated by the kidneys.—*Boston Medical and Surgical Journal*.

SEPARATION OF CARBOLIC ACID FROM URINE (E. Salkowski: *Fres. Zeitsch.*, No. 3, 1873; from *Archiv d. Physiol.*, Bd. v., p. 353).—The urine is made strongly acid with tartaric acid, and distilled until about one-half of the liquid has passed over. The distillate should then be shaken twice with ether, the ether decanted, and allowed to evaporate. The residue can then be treated with a little water, filtered if necessary, and Lex's test (see below) applied.

In 200 cubic centimetres of normal urine, no carbohc acid can be detected; but if 0.1 gramme be added (= 1 part in 2000) an intense blue coloration is produced, and this color can be perceived when the urine contains only one part in 4000.

Lex's test for carbohc acid is performed with ammoniac hydrate and calcic hypochlorite (chloride of lime). To the suspected fluid is added about one-fourth of its volume of ammonia-water, and then a few drops of a saturated solution of hypochlorite, and the mixture gently warmed to boiling. If much carbohc acid is present, a blue color appears immediately; but if only a minute amount, it does not appear until about fifteen minutes have elapsed. Too much calcic hypochlorite, or a too rapid application of heat, prevents the reaction. The fluid which has once turned blue may become colorless by standing; but the color can be restored by the addition of a few more drops of the hypochlorite. If the fluid is acidulated with sulphuric or hydrochloric acid, the blue changes to a red color.—*Boston Med. and Surg. Journal*.

THE BEST CATHETER FOR ENLARGED PROSTATE (by Prof. E. Andrews).—It seems not to be generally known, while men are inventing costly and complicated silver catheters for cases of enlarged prostate, that there is already in existence a very simple and inexpensive one, which is as near to absolute perfection as

human inventions usually get. I refer to Mercier's *sonde coudée*.

For cases of enlarged prostate, Mercier's *sonde coudée* is a splendid instrument. It slips into the bladder without resistance or pain, when every effort with the ordinary silver instrument only brings blood. The patient himself can use it with ease, safety, and comfort, and thus prevent much of the distress and misery which old men often suffer from retention of urine. It is not only in cases of enlarged prostate that this instrument is useful; it is superior to any other for nineteen-twentieths of the male patients by whom a catheter is required, and will, when it is better known, almost totally supplant the other forms now in use.

The *sonde coudée* is very simple. It consists of a black, flexible catheter, having two peculiarities:

1. Its walls are about twice or thrice thicker than the ordinary catheter, so that it possesses a mixed flexibility and firmness which enables it to conform easily to the curves of the urethra, and yet it requires no wire when inserted.

2. Half an inch from the tip it is bent forward at an obtuse angle. This curve is the peculiarity which enables it to slip past the overhanging central lobe of the prostate. Its extremity strikes the lobe obliquely, lifting it a little, while the flexibility of the instrument allows it to bend forward and evade the obstacle with the greatest ease.—*Chicago Medical Examiner*.

LOCAL USE OF CHLORAL HYDRATE IN SOFT ULCERS AND ULCERATED BUBOES.—In an article published in the April number of the *Giornale Italiano delle Malattie Veneree*, Dr. De Paoli gives his experience of the local action of chloral hydrate in the above cases, such as was exhibited in the Clinique for Venereal and Skin Diseases of Bologna. Four cases are related, in which large ulcerated buboes were highly benefited in their last stages by the application of a solution of chloral hydrate (ten parts of chloral to thirty of water). The healing process was remarkably regulated and hastened by the application. The author thinks that in all sores with abundant suppuration and want of tone chloral is of the greatest use, and that its employment may be beneficially extended, as a slightly exciting and antiseptic agent, to suppurating wounds, and especially gunshot wounds. He states that Professor Gamberini has applied the same solution with marked results to the soft ulcers of prostitutes, especially during the later period of cicatrization, the virulent power and suppuration of the sores being considerably diminished, whilst auto-inoculation of the sores in other parts was not observed in the patients treated. He suggests that chloral hydrate may be a good substitute in certain cases for nitrate of silver and iodoform, and concludes, in summing up his paper, "that it diminishes the virulence of sores, has the advantage of not irritating the inguinal glands, and removes the offensive smell which proceeds from ulcers, especially those of the female genitals."—*London Lancet*.

A NEW SUBSTITUTE FOR QUININE.—Among the specimens of drugs exhibited in the International Exhibition in Vienna is the *Echites scholaris*, a plant of the natural order *Apocynææ*. It is especially abundant at Luzon, in the province of Batangar, in the Philippine Islands; and its bark has long been used by the natives, under the name of *dila*, as a remedy in all kinds of fever. Herr Gruppe, an apothecary in Manilla, has found in it an uncrystallizable, very hygroscopic, bitter substance, to which he has given the name of *ditain*. The principal Spanish physician in Manilla, Dr. Miguel Zina, has given it to numerous hospital patients under his care, and has found that *ditain* is not only a perfect substitute for quinine, but that its use is not followed by the disagreeable results which often at-

tend the use of quinine. It is given in the same dose and in the same way as quinine. In many cases, also, its activity as a tonic was well marked. The *ditain* is prepared from the bark, in the same way as quinine from cinchona; 100 grammes of bark give 2 grammes of *ditain*, 0.85 gramme of sulphate of lime, and 10 grammes of a perfectly inactive extractive matter. A single tree yields a large quantity of bark without injuring its growth. It is calculated that the price of *ditain* in Europe would be about 160 francs per kilo (3s. 6d. to 7s. per ounce).—*The British Medical Journal*, June 7, 1873.

AMAUROSIS RESULTING FROM POISONING WITH MORPHIA.—A case of this character is reported by Dr. W. Wagner, of Odessa, in *Schmidt's Jahrbücher* for 1873. The patient, a man 32 years of age, suffered from periodical attacks of vomiting, for the relief of which he had recourse to injections of morphia.

Having been attacked by his disease while upon a journey, during five days, he had prepared solutions containing 1.92 grammes of the acetate of morphia; but it is not probable that he used the whole amount. Dr. Wagner found the patient drowsy, with a small and slow pulse, both pupils contracted and fully immovable. The arteries of the retina were very much contracted; the veins normal. The light of a brightly-burning lamp was not perceived. In this state the patient remained for two days. Further observation was prevented by the removal of the patient by his wife without the permission of the doctor.

CHRONIC PHARYNGITIS, AND ITS CURE BY THE GALVANO-CAUTERY (E. Michel: *Deutsch. Zeitschrift für Chirurgie*, Band ii., 1872, 154-164).—The larger and smaller circumscribed hyperplasiae of the mucous membrane which characterize granular pharyngitis are with difficulty healed by the ordinary methods resorted to (nitrate of silver). The author cauterizes quite superficially these granular enlargements with a galvano-cautery, and claims to have effected a cure in all cases with but three or four applications. The galvano-cautery thus operates more quickly, and at the same time is less painful, than the nitrate of silver and other caustics. For the lateral portions of the naso-pharyngeal space the laryngeal or rhinoscopic mirror must be employed.

DEVELOPMENT OF THE FRONTAL BONE (*Reichert u. Du-Bois Reymond's Archives*, 1872, p. 649).—According to H. Jhering, the frontal bone, in addition to arising from two main centres, presents a number of accessory points of ossification. These are six in number, and are distributed as follows: two confined to the nasal spine; one placed on each side of the median line between the orbital and nasal portions of the bone; and one, which is described in detail, situated at the external lateral process. The last-mentioned is the most important of the accessory centres; since it occasionally remains distinct from the frontal up to the first or second year, and would appear to be homologous with the post-frontal bone of the skull of lower mammals.

PRESENCE OF ALCOHOL IN THE HUMAN URINE.—After having shown that urine on putrefying produces alcohol, M. Béchamp has sought to discover alcohol in the urine of persons who had previously been subjected to a *régime* of abstinence from wine and alcoholic drinks. In the urine collected in these conditions, and in which fermentation had been prevented by the addition of a little creasote, M. Béchamp has found enough alcohol to be able to set it on fire. In one of the experiments there was enough alcohol in two litres of urine to be determined by the alcoholometer. The author believes that the liver produces alcohol physiologically.—*London Lancet*; from *Gazette Médicale de Bordeaux*.

ATROPIA SUBCUTANEOUSLY IN CHOLERA.—Dr. Hodgen mentioned (Proceedings St. Louis Medical Society, June 7, 1873) a plan of treatment pursued by him in a few cases at the close of the epidemic of 1866, with results considered sufficiently encouraging to merit further trial. In the *stage of collapse*, the doctor injected subcutaneously from a sixtieth to a thirtieth of a grain of sulphate of atropia, and injected freely into the bowels warm water with a little salt in it; reaction and convalescence followed in over half the cases without fever. The doctor also referred to the importance of promoting the action of the kidneys as early as possible, by diuretics and warm poultice or fomentation over the kidneys, not to eliminate the cholera-poison, but to obviate uræmia.—*St. Louis Medical Journal*, July, 1873.

ACTION OF THE INTERCOSTAL MUSCLES.—Dr. Thomas Dwight (*Boston Medical and Surgical Journal*, 1873) has reviewed the literature of this much-discussed subject, besides investigating the function of the intercostal muscles in the dog. He concludes that the theories of Hutchinson and Hamburger are to be modified. The intercostals have little influence on ordinary respiration; they are for the most part passive structures, though both internal and external muscles at times raise the ribs, and by sudden action may be made to perform the part of accessory expiratory muscles. Both sets in the lower part of the chest may tend to draw the ribs downward. Slight causes may modify the action of any part of them.

POISONING BY ALUM.—A fatal case of poisoning by the ordinary potassium alum is reported in full by Dr. Hiequet (*Ann. d'Hygiène*, January, 1873), with the chemical analysis of the tissues, and remarks upon the toxicology of alum. It was caused by the accidental ingestion of about an ounce instead of Epsom salts. The symptoms and lesions produced were those of a corrosive acid poison, there being found destruction of the epithelium in the mouth, throat, œsophagus, and stomach, two gangrenous patches in the small intestine, and also extensive peritonitis.—*Boston Medical and Surgical Journal*.

DEATH FROM HEAT-STROKE IN A VAPOR-BATH.—An inquest was held at Stratford, Essex, a few days ago, on the body of a man who died while taking a vapor-bath in the public bath-rooms of the locality. The temperature of the bath at the time of the occurrence was not, according to the evidence of the proprietor of the rooms, above 110°; but Drs. Whitehouse and Kennedy, who had examined the body soon after death, expressed their belief that it could not have been less than 200°. The jury returned a verdict of "Death from coma, accelerated by the use of an over-heated bath."—*London Lancet*.

MISCELLANY.

A DOCTOR'S STORY.

BY W. M. CARLETON.

I.

Deacon Rogers he came to me;
"Wife's a-goin' to die," said he.

"Doctors great, an' doctors small,
Haven't improved her any at all.

Physic and blister, powders and pills,
And nothing sure but the doctor's bills!

Twenty old women with remedies new
Bother my wife the whole day through;

Sweet as honey, or bitter as gall,—
Poor old woman, she takes 'em all:

Sour or sweet, whatever they choose,
Poor old woman, she daren't refuse.

So she pleases whoe'er may call,
An' death is suited the best of all.

Physic and blister, powder an' pill,—
Bound to conquer, and sure to kill!"

II.

Mrs. Rogers lay in her bed,
Bandaged and blistered from foot to head.

Bandaged and blistered from head to toe,
Mrs. Rogers was very low.

Bottle and saucer, spoon and cup,
On the table stood bravely up;

Physic of high and low degree,
Calomel, catnip, boneset tea:

Everything a body could bear,
Excepting light and water and air.

III.

I opened the blinds; the day was bright,
And God gave Mrs. Rogers some light.

I opened the window; the day was fair,
And God gave Mrs. Rogers some air.

Bottles and blisters, powders and pills,
Catnip, boneset, syrups and squills,

Drugs and medicines, high and low,
I threw them as far as I could throw.

"What are you doing?" my patient cried;
"Frightening Death," I coolly replied.

"You are crazy!" a visitor said;
I flung a bottle at her head.

IV.

Deacon Rogers he came to me;
"Wife is a-comin' around," said he.

"I re'lly think she will worry through;
She scolds me just as she used to do.

All the people have poohed and slurred—
All the neighbors have had their word;

'Twas better to perish, some of 'em say,
Than be cured in such an irregular way."

V.

"Your wife," said I, "had God's good care,
And his remedies,—light and water and air.

All of the doctors, beyond a doubt,
Couldn't have cured Mrs. Rogers without."

VI.

The Deacon smiled, and bowed his head;
"Then your bill is nothing," he said.

"God's be the glory, as you say!
God bless you, Doctor! good-day! good-day!"

VII.

If ever I doctor that woman again,
I'll give her medicine made by men.

—*Maine Farmer.*

THE SHAH OF PERSIA AND THE CONVENTION OF GENEVA.—We are authorized to state that the visit of his Majesty the Shah of Persia to this country has resulted in an act which will be highly agreeable to lovers

of humanity. Through the interpreter, the Shah expressed the warm interest which he felt in this subject, and his desire to give diplomatic adhesion to the convention of Geneva, for neutralizing the sick and wounded in war, and the persons and materials provided for their succor. The convention has already been signed by all European monarchs, including the Sultan of Turkey, who gave his adhesion in 1865. The protocol of the convention was left open in 1864 at Bern. The adhesion of the Shah will, therefore, be addressed to the High Federal Council of Switzerland. The Shah is already familiar with the emblem and its present merciful significance among European troops in time of war. The red cross was flying, at the review at Windsor, over the ambulance in the rear, which was drawn up facing the saluting-point. In Austria, in Switzerland, and in Sweden, all medical officers and the hospital staff corps bear the *brassard* on parade and during movements of troops in peace, in order to popularize the emblem and to make its meaning familiar. The Shah is the first purely Asiatic monarch who has given his adhesion to the convention and to the merciful principles which it establishes. M. Henry Dunant, who has devoted the best years of his life and has sacrificed all his private interests to the development of the humanitarian idea with which he was inspired by the sight of the horrors of Solferino, must be earnestly congratulated at seeing the fertile idea, which has taken firm root throughout Europe and has borne noble fruit there, now planted in the soil of Asia. *It is strange that, of all civilized powers, the United States of America has alone withheld its assent from the convention.*—*British Medical Journal.*

VEHICLE FOR CHLORAL HYDRATE.—J. G. Plumer, in *London Phar. Jour. and Trans.*, recommends, as the best vehicle for administering chloral hydrate, the syrupus flor. aurantii of the British Pharmacopœia. We have ourselves found nothing to answer better than essence of peppermint for disguising the peculiarly acid and nauseous taste of the drug.—*Detroit Review of Medicine.*

"SMART."—An American paper says, 'Massachusetts is noted for two things: intelligence and patent medicines.' We presume the intelligence is displayed in selling, not in taking, the physic."—*Fun.*

THE Regents of Michigan University have decided not to appoint the homœopathic professors, as ordered by the Legislature.—*The Clinic.*

CHOLERA of a malignant type has appeared at Cawnpore, and smallpox rages at Lucknow.—*London Lancet.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JULY 15, 1873, TO JULY 21, 1873, INCLUSIVE.

WOODHULL, A. A., ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of the South, for assignment to duty. S. O. 143, A. G. O., July 15, 1873.

SMART, CHARLES, ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Meacham, to report in person to the Commanding General, Department of the Platte, for assignment to duty. S. O. 143, c. s., A. G. O.

MILLER, GEORGE MCC., ASSISTANT-SURGEON.—Assigned to duty at Camp Grant, Arizona Territory. S. O. 51, Department of Arizona, June 20, 1873.

LIPPINCOTT, H., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon King, to comply with orders received from War Department. S. O. 125, Department of the South, July 12, 1873.

MEACHAM, FRANK, ASSISTANT-SURGEON.—Assigned to duty at Fort Monroe, Virginia. S. O. 143, c. s., A. G. O.

DE WITT, C., ASSISTANT-SURGEON.—Assigned to duty at the Presidio of San Francisco. S. O. 86, Department of California, July 11, 1873.

YEOMANS, A. A., ASSISTANT-SURGEON.—Assigned to duty at Fort Garland, Colorado Territory. S. O. 108, Department of the Missouri, July 17, 1873.

KING, WILLIAM H., ASSISTANT-SURGEON.—Assigned to duty at Atlanta, Georgia. S. O. 125, c. s., Department of the South.

WEEKLY RETURN OF DEATHS AND INTERMENTS IN PHILADELPHIA FOR THE WEEK ENDING SATURDAY, JULY 19, 1873.

DISEASES.	Adults.	Minors.	DISEASES.	Adults.	Minors.
Abscess.....	1	...	Epilepsy.....	1	...
Albuminuria.....	1	1	Erysipelas.....	...	1
Anæmia.....	...	1	Fever, Scarlet.....	...	6
Apoplexy.....	4	...	" Typhoid.....	5	2
Asphyxia.....	...	3	" Typhus.....	...	1
Burns and Scalds.....	1	1	Heart Clot.....	...	1
Cancer of Breast.....	1	...	Hemorrhage from Lungs.....	2	...
" Liver.....	1	1	Hooping-Cough.....	...	2
" Uterus.....	2	...	Inanition.....	...	9
Casualties.....	4	3	Inflammation of Brain ...	1	10
Cerebro-Spinal Meningitis.....	...	5	" Bronchi.....	1	2
Cholera Infantum.....	...	126	" Lungs.....	2	6
" Morbus.....	9	...	" Peritone.....
Cirrhosis of Liver.....	2	...	" un.....	...	2
Congestion of Brain.....	2	7	" Stomach & Bowels.....	6	11
" Lungs.....	...	1	Jaundice.....
Consumption of Lungs.....	37	7	Mania a potu.....	...	3
Convulsions.....	...	14	Marasmus.....	...	15
" Puerperal.....	1	...	Measles.....	...	1
Cramps.....	...	1	Murder.....	...	1
Croup.....	...	1	Old Age.....	...	4
Cyanosis.....	...	1	Paralysis.....	...	9
Debility.....	12	14	Rheumatism.....	...	1
Diarrhoea.....	4	8	Smallpox.....	...	1
Diphtheria.....	...	1	Softening of Brain.....	...	2
Disease of Brain.....	...	1	Still-Born.....	...	23
" Heart.....	4	2	Stricture of Bowels.....	...	1
" Kidneys.....	3	1	Suicide.....	...	1
" Ovaries.....	1	...	Sunstroke.....	...	1
" Stomach.....	1	...	Syphilis.....	...	2
Dropsy.....	2	...	Tabs Mesenterica.....	...	1
" of Brain.....	...	7	Tetanus.....	...	1
" Kidneys.....	...	4	Ulceration of Stomach.....	...	2
Drowned.....	4	2	Unknown.....	...	3
Dysentery.....	2	1			
Effusion on Brain.....	...	3			
TOTALS.....				148	319

METEOROLOGICAL OBSERVATIONS TAKEN AT THE SIGNAL OFFICE, PHILADELPHIA, DURING THE WEEK ENDING SATURDAY, JULY 19, 1873.

Month and Day.	Barometer. Daily Mean.	Thermom. Daily Mean.	State of Weather.	Rain. In.
JULY.				
Sunday13th	30.27	71	Fair, Clear.	...
Monday14th	30.09	79	Clear, Fair.	.30
Tuesday15th	29.97	81	Clear, Cloudy.	...
Wednesday.....16th	29.99	79	Fair.	...
Thursday.....17th	29.82	81	Cloudy, Fair, Clear.	.04
Friday.....18th	29.87	74	Fair, Cloudy.	.59
Saturday.....19th	29.90	72	Fair, Cloudy.	.43
Means.....	29.99	77		1.26

The surface of the cistern of Barometer is located 71.92 feet above the mean level of the sea.

Barometer corrected for temperature, elevation above sea, and instrumental error.